Chapter 5 - Natural Environment

Colorado Springs' citizens and government place a high priority on the natural environment. The Open Space Plan, adopted in 1997 reflects that priority and serves as a foundation for the Comprehensive Plan 2020 Land Use Map and natural environment policies. Other objectives include protecting natural features, minimizing impacts of environmental hazards, and resource conservation.

The City's quality of life is enhanced through the preservation of open space and greenways. These designated areas protect natural resources and provide a regional asset that people and wildlife depend on, including riparian areas, foothills, bluffs and mesas, mature vegetation and scenic vistas. They provide protection from natural hazards, such as floods and improve water quality. Open spaces and greenways provide wildlife habitat, help shape growth, maintain scenic vistas, and provide recreational opportunities for residents. In certain instances, these areas will also accommodate public utility corridors.

This chapter establishes policies to preserve and protect the significant features of the city's natural environment through open space conservation and development standards and guidelines. Policies will help evaluate development and, when possible, incorporate such features as site amenities. In addition, risks posed by environmental hazards are minimized and resources are protected and conserved.

Definitions

<u>Best Management Practices</u>: Any activities, practices, procedures, programs, or other conservation measures designed to prevent or reduce the discharge of chemical, physical or biological pollutants directly or indirectly into surface water or groundwater in order to control soil loss and achieve water quality protection goals.

<u>Environmental Sensitive Areas</u>: Areas containing coal hazards, floodplains, geologic hazards, hillsides, riparian areas, water bodies or other areas that may pose a hazard to development as well as areas with significant natural features.

<u>Floodplains</u>: Floodplains are the lands adjacent to lakes and streams subject to periodic flooding. Floodplains naturally store floodwater, protect water quality and are valuable for recreation, and fish and wildlife habitat. All land located within 200 feet of the top of the bank or within the 500 year floodplain as illustrated on the FEMA map, whichever is greater, of specific intermittent and perennial streams within the City which have been identified as significant due to their natural characteristics, wildlife habitat, riparian vegetation or open space and recreational opportunities. The boundary of the Streamside Overlay Zone as defined herein may be expanded to include those adjacent areas, which exhibit a continuation of the relevant stream characteristics.

<u>Greenbelt</u>: A strip of natural vegetation growing parallel to a stream that provides wildlife habitat and an erosion and flood buffer zone. This strip of vegetation also retards rainfall runoff down the bank slopes and provides a root system that binds soil particles together.

<u>Greenway</u>: A linear open space established along either a natural corridor, such as a creek or stream valley, or ridgeline, or overland along a railroad right-of-way converted to recreational use, a canal, scenic road, or other route. It is any natural or landscaped course for pedestrian or bicycle passage. Greenways are also open space connectors linking parks, nature reserves, cultural features, or historic

sites with each other and with populated areas. Locally, certain strip or linear parks can be designated as parkway.

<u>Open Space</u>: Areas in a natural or primarily natural state containing significant natural, aesthetic, or cultural features that warrant permanent protection.

<u>Riparian Areas</u>: The upland areas adjacent to the natural drainage ways, lakes, ponds, reservoirs and wetlands characterized by a narrow band of lush vegetation within much drier surroundings.

<u>Public Utility Corridors</u>: Corridors for the placement of water, wastewater, electric and gas system infrastructure owned by Colorado Springs Utilities or other service providers, or for which easements have been granted, that may also provide open space functions.

<u>Significant Natural Features</u>: Those ridgelines, bluffs, rock outcroppings, view corridors, foothills, mountain backdrops, unique vegetation, floodplains, streams, surface water, air, natural drainage ways and wildlife habitats that contributes to the attractiveness of the community.

Stream: A natural intermittent or perennial watercourse.

<u>Urban Forest</u>: All the trees and shrubbery on public or private property within the City.

<u>Urban Separator</u>: Open space used to spatially define, identify and separate developed areas, in order to provide relief from continuous development, to shape the form of the city in accord with its significant land forms and natural features, and to achieve more sustainable and environmentally responsible patterns of growth.

Related Planning Documents

- Colorado Springs Open Space Plan
- Colorado Springs Parks, Recreation & Trails Master Plan
- Drainage Basin Planning Studies
- Colorado Springs Area Air Quality Maintenance Plans
- Robinson Geologic Hazard Maps, 1977

Open Space

Objective NE 1: Balanced Open Lands System

Provide a balanced system of open lands, natural areas, wildlife corridors and habitat areas, trails, and greenways using a variety of conservation methods, as guided by the 1997 Open Space Plan.

Policy NE 101: Implement the City's Open Space Plan

Implement the Open Space System based on the opportunity presented by the physical landscape and conservation of important natural resources. Base the desired amount of open space on resource preservation and the conservation of natural systems, rather than in terms of acreage per capita.

Strategy NE 101a: Incorporate the Open Space Plan into the 2020 Land Use Map

Incorporate the Open Space Plan, and updates thereto, into the 2020 Land Use Map and policies. Reflect the recommendations of the Open Space Plan on the 2020 Land Use Map, including major elements of the Open Space Plan, existing open space, open spaces designated in approved master plans, existing and proposed greenways and trails, and all open space candidate areas.

Strategy NE 101b: Open Space Geographic Information System

Establish and maintain an open space geographic information system as a public information resource and planning tool.

Strategy NE 101c: Open Space Conservation

Develop incentives and options for property owners who contribute land to the open space system, consistent with the Open Space Plan.

Strategy NE 101d: Use Master Plans to Refine Open Space

Use individual master plans to identify and conserve significant natural features, natural areas, and greenways in individual master plans that are generally consistent with the Open Space Plan and the Comprehensive Plan policies and the 2020 Land Use Map. Update individual master plans with City and property owner coordination.

<u>Strategy NE 101e</u>: Use Annexation Agreements for Open Space Dedication

Dedicate as open space lands with high value to the overall open space system, in development of annexation agreements for specific properties.

<u>Strategy NE 101f</u>: Open Space and Park Land Dedication

Develop criteria for determining circumstances in which open space dedication may satisfy park dedication requirements in the land development and subdivision process.

Policy NE 102: Preserve Open Space Areas That Provide Multiple Benefits

Provide multiple benefits on open space lands whenever possible, including habitat, recreational opportunities, urban separators, and preservation of view corridors. Utilize utility corridors for secondary open space functions.

Strategy NE 102a: Encourage Preservation of Open Space with Multiple Benefits

Foster cooperative partnerships among open space users and providers to achieve multiple benefits.

Strategy NE 102b: Identify Lands That Could Serve as Urban Separators

Identify strategic lands that provide the city with a well-defined edge, direct growth and preserve community character for public ownership or other land conservation measures.

Natural Features

Objective NE 2: Preserve Site Specific Natural Features

Identify individual features at the detailed development review stage. Colorado Springs is blessed with a diversity of significant natural features that are enjoyed by the community at large and contribute to the City's overall character and quality of life. There are also a significant number of small, site specific natural features whose presence offers additional small scale opportunities for unique and innovative design to contribute to an area's or site's identity. The Open Space Plan incorporates the Significant Natural Features Inventory but inventories and maps of all features are not complete.

Policy NE 201: Identify, Evaluate and Incorporate Significant Natural Features

Preserve the variety of spectacular natural features, so prevalent in and around the City, for the enjoyment of residents and visitors. Incorporate significant natural features on individual sites into the design of new development and redevelopment. Identify and inventory natural features through best management practices prior to incorporating features into site planning. Include significant natural features that contribute to the attractiveness of the community such as ridgelines, bluffs, rock outcroppings, view corridors, foothills, mountain backdrop, urban forest, floodplains, natural water bodies, clean air, natural drainageways and wildlife habitats.

Strategy NE 201a: Determine the Presence and Value of Site-Specific Natural Features
Utilize progressively more detailed land suitability analysis to identify and evaluate site-specific natural features for conservation on all master plans, concept plans, development plans and building permits.

Require an inventory of significant natural features or a determination of "no significant features" prior to site disturbance. Base the value of natural features on such relative qualities as scarcity, size, ecological integrity, maturity, location and function.

<u>Strategy NE 201b</u>: Incorporate Natural Features into Design of All Development

Preserve and incorporate significant natural features into the design of new development by using innovative planning, design and best management practices. Assist such efforts by private landowners and organizations to incorporate natural features into all development and to protect, restore, or enhance privately owned natural features.

Strategy NE 201c: Preserve the Natural Contours of the Land

Preserve and incorporate the natural contours of the land in the design of new development by using innovative planning, design and management practices. Discourage overlot grading or storage or import/export of material prior to approval of any development application.

Strategy NE 201d: Development in Sensitive Areas

Recognize and avoid, whenever possible, adverse impact to significant natural features in the placement of infrastructure. If this is not possible, site facilities to minimize their impact and minimize restoration of disturbed areas. Revise subdivision and development standards to provide greater flexibility in the placement of infrastructure in and around natural features and transfer of density outside such areas. Include a protection, maintenance and mitigation plan in all proposals for development on sites containing significant natural features.

Strategy NE 201e: Mining Activities

Formulate strategies to mitigate and/or eliminate the negative effects of mining activity on the City's mountain backdrop and the region's recreational and tourism resources.

Policy NE 202: Protect and Restore Natural Ecosystems and Habitat

Protect natural ecosystems and habitat from the adverse impacts of urbanization and land use, fostering their continued beneficial functions. Preserve, protect and enhance the hydrologic, ecological, and aesthetic functions of riparian areas, natural water bodies and drainage systems. Preserve, protect and enhance the interface between wildlands and urban development for resource and public safety protection.

Strategy NE 202a: Natural Ecosystems Protection

Protect natural ecosystems and habitats for native plant and animal species on public and private lands through land use plans, development plans, best management practices and ordinances. Update the development review process to require protection and mitigation plans for development on lands with significant natural ecosystems and habitats.

Strategy NE 202b: Collaborate on Watershed Management

Develop a comprehensive watershed management program for all watersheds in conjunction with other regional jurisdictions.

Strategy NE 202c: Drainage Way Protection

Protect riparian areas and natural water bodies on public and private lands as natural drainage ways and ecosystems through land use plans, development plans, best management practices and ordinances. Update Drainage Basin Planning Studies and the development review process to require mitigation plans for development or modifications to existing utilities on lands with natural drainage ways.

<u>Strategy NE 202d</u>: Natural Ecosystem and Drainage Way Restoration

Promote the restoration of significant natural ecosystems, habitats for native plant and animal species, natural water bodies and drainageways on public lands and require protection and mitigation plans for private lands during the development review process.

Policy NE 203: Manage and Enhance the Urban Forest

Manage the city's urban forest to ensure an abundance of healthy and attractive trees, including parklands and street trees. Recognize that the diversity of tree species provides many benefits, including improving air quality, reducing noise levels, providing wildlife habitat, and adding to the aesthetics and overall quality of life in the community. Preserve, promote, and enlarge the urban forest to enhance air quality, wildlife habitat, and community aesthetics and overall quality of life; abate noise; and reduce flood damage. Manage potential fuel problems and development practices to reduce forest fire risk.

Strategy NE 203a: Enhance Community Awareness

Enhance community awareness about the importance of the urban forest and the positive impact trees have upon the environment. Develop a Wildfire Management Program to address impacts of the wildland/urban interface.

Strategy NE 203b: Public Landscaping

Preserve and protect trees and other landscaping on public property. Provide adequate funding to assure safe, well-maintained and healthy trees and shrubs on public property. Do not allow landscaping to obscure traffic signs or signals.

Strategy NE 203c: Promote and Maintain Tree Planting

Promote public and private tree planting, replacement and preservation programs to sustain and expand the tree canopy coverage. Support private organizations that promote tree planting in both native areas and along public rights-of-way.

Strategy NE 203d: Identify Opportunities for Cooperative Projects

Work with Urban Forestry of the Parks and Recreation Group and other government entities to identify opportunities for cooperative projects to expand and maintain the urban forest. Strive for collaborative efforts to achieve the goals outlined in the City's Landscape Ordinance.

Policy NE 204: Protect Hillsides and Ridgelines

Improve hillside and ridgeline development to avoid negative aesthetic and environmental consequences to the immediate and surrounding area. Do not degrade the views and vistas to and from public areas.

Strategy NE 204a: Monitor the City's Hillside Ordinance

Monitor the provisions of the Hillside Ordinance to protect the environmental conditions of hillside areas and adjust such provisions as appropriate so that the hillsides and ridgelines are protected.

Strategy NE204b: Preserve and Enhance the Mountain Backdrop and Ridgelines

Develop standards for the preservation of important view corridors. Define important view corridors to and from important landmarks, regional parks, and open spaces, and develop additional regulations for identified view corridors.

Environmental Hazards and Constraints

Objective NE 3: Minimize Environmental Hazards and Constraints

Take into account natural and man-made hazards and the appropriate relationship between the natural and built environment in all planning, policy, and development decisions. Minimize impacts from natural and man-made hazards to protect citizens, property, and the environment. The city, county, and other appropriate governmental agencies will cooperatively develop plans, programs, regulations, and incentives to reduce the impacts from natural and man-made hazards.

Policy NE 301: Develop Plans and Regulations

Develop plans and regulations to protect environmental quality and important ecological functions and minimize hazards to health and property through development reviews and implementation of plans and ordinances addressing environmental hazards and constraints.

Strategy NE 301a: Refine Plans and Regulations

Continually refine plans and regulations to address floodplains, streams/drainageways, hillsides and geologic hazards and ensure consistency between these planning and implementation tools

Strategy NE 301b: Master Plans to be Consistent with Drainage Basin Plans

Ensure that all individual master plans are consistent with the Drainage Basin Planning Studies. Update existing master plans as development review is requested. Foster cooperation between the city and property owners to ensure that individual master plans are consistent with the Drainage Basin Planning Studies and the Comprehensive Plan policies and land use maps or require an amendment to these City Plans.

Strategy NE 301c: Carefully Site Infrastructure in Hazard and Constrained Areas

Recognize and avoid, whenever possible, geologic hazard and constrained areas in the placement of infrastructure. If this is not possible, siting of facilities and necessary access will minimize their impact and maximize restoration of disturbed areas. Revise subdivision and development standards to provide greater flexibility in the placement of infrastructure in and around environmentally sensitive areas. Include a protection and mitigation plan in all proposals for development on sites containing geologic hazards and constrained areas.

Strategy NE 301d: Mitigate Identified Hazards

Develop and use mitigation plans to minimize risk to life and property by structural and non-structural design or modification of actions. Use mitigation plans where it is not otherwise practical to place structures or human activities outside of these hazard areas. Discourage new development in delineated hazard areas.

Policy NE 302: Protect Drainageway and Floodplains

Limit development of land within floodplains, which should remain, or be returned, to its natural state. Development can reduce a floodplain's ability to store and convey water, intensifying velocity and depth of floodwater in other areas. Areas subject to significant flooding also pose a threat to citizens and property. Floodplains are lands identified in the Streamside Overlay Zone and FEMA designations.

Strategy NE 302a: Use Drainage Basin Planning Studies for Stormwater Management
Use the established method of drainage treatment for a particular Drainage Basin Planning Study for all proposed development or redevelopment, or require an amendment to the Study if changes are proposed or required. Use Best Management Practices to address erosion, sediment control and stormwater quality during construction and after development. Minimize the adverse impacts of stormwater runoff, including erosion/sedimentation, to drainageways and other drainage facilities.

Plan and utilize floodplains and drainageways as greenways for multiple uses including conveyance of runoff, wetlands, habitat, trails, recreational uses, utilities and access roads when feasible, considering the primary intended use.

Strategy NE 302b: Retain Floodplains in their Natural State

Floodplains will remain as undisturbed riparian corridors, wildlife habitat, or wetlands whenever possible. Trails or other open recreational facilities and utility facilities such as electric, gas, and water mains may be appropriate in certain areas. Identify these areas in master plans, development plans and development proposals.

Strategy NE 302c: Flood Damaged Property Will not be Permitted to Rebuild

Compliance with FEMA requirements is required for all properties within high flood hazard areas. Any structural rebuilding must minimize the potential for sustaining future damage. Do not grant a building permit for expansion to properties prone to damage by flooding. Prepare a plan for property acquisition of flood-damaged property and undevelopable land in high flood hazard areas. Permit rebuilding or expansion as appropriate only for necessary utility infrastructure such as electric, gas, and water mains or other public infrastructure.

Policy NE 303: Avoid or Mitigate Effects of Geologic Hazards

Undertake efforts through the development review process to substantially reduce adverse consequences of development by recognizing and appropriately addressing geologic processes. Discourage development in potentially hazardous areas associated with hillside and geologic development constraints, including steep slopes, erosion, unstable soil, subsidence, coal hazards or similar development constraints

Strategy NE 303a: Identify Geologic Hazards

Carefully delineate geologic and coal hazards and determine appropriate locations for development through the development review process.

Strategy NE 303b: Monitor the City's Geologic Hazard Ordinance

Monitor the provisions of the Geologic Hazard Ordinance to protect the environmental conditions within geologic hazard areas and adjust them as appropriate so those geologic hazards are mitigated.

Natural Resource and Environmental Concerns

Objective NE 4: Protect and Conserve Natural Resources

The natural environment has played an important part in the history of the region. Past City and County policies and programs have emphasized the protection of these areas. As the region has grown, community interest in preserving the region's natural resources has also increased. Awareness and concern about the impact of outdoor noise and light to neighborhood livability is also increasing. Incorporate policies and strategies to protect and enhance the region's natural resources, such as water, air and energy and to preserve the region's unique character and quality of life

Conserve natural resources by making energy usage more efficient, utilizing renewable natural resources and recycling efforts. Responsibility for more efficient use of resources and conservation efforts includes the City, Colorado Springs Utilities and the consumer.

<u>Policy NE 401</u>: *Maintain Stormwater Standards*

Maintain full compliance with Federal Clean Water Act regulations. Protect and maintain the quality of stormwater discharged to streams, drainage facilities and other water bodies in the region.

Strategy NE 401a: Protect and Maintain Stormwater Quality

Protect and maintain the quality of stormwater within all drainage basins as a necessary component of existing ecosystems and as a critical resource for the community. Implement practices and programs, including public education, to protect and maintain the quality of stormwater discharges. Adopt zoning/subdivision regulations and Best Management Practices and provide incentives to reduce impervious areas. Strengthen erosion prevention and sedimentation control regulations.

Strategy NE 401b: Control Water Pollution

Control and monitor the discharge of pollutants associated with stormwater through pollution control plans, improved land use configurations, use of detention ponds, Best Management Practices and other requirements to control degradation of streams, lakes and other drainage facilities.

Policy NE 402: Water Conservation

Encourage water conservation in both the public and private sector through information and educational services, financial incentive programs, and requirements and incentives in the planning process.

Strategy NE 402a: Utilize Water Conservation Regulations

Utilize adopted landscaping standards requiring water-conservation irrigation and use of drought-tolerant plants for new commercial and multi-family developments. Establish minimum water conservation standards for landscape and irrigation systems for all development subject to City landscape plan review and approval.

Strategy NE 402b: Expand Opportunities Non-potable Water Use

Work with the Colorado Department of Public Health and Environment, Colorado Springs Utilities, and other government entities and developers to develop opportunities for use of non-potable water. Include self-designed water reuse for consumers of large quantities of water in development plans. Consider non-potable water for large non-residential consumptive uses that do not require potable water. Examples include, but are not limited to, golf courses and public facilities, such as city parks.

Policy NE 403: Maintain Air Quality Standards

Maintain full compliance with National Ambient Air Quality Standards (NAAQS) which are designed to ensure protection of public health and welfare and control stationary and mobile source emissions of pollutants, particularly pollutants causing adverse health effects and impairing visibility.

Strategy NE 403a: Coordinate Land Use and Transportation Planning

Conform to the most current State and local air quality implementation and maintenance plans for proposed land use actions when developing land use and transportation plans. Prepare plans and support proposals for appropriate higher density residential development and mixed land use development that encourage inter-modal transportation and reduce the rate of growth of vehicle-miles of travel in the region.

Strategy NE 403b: Continue Air Quality Planning

Actively participate in State and local air quality monitoring and planning efforts to ensure the region remains in attainment of all National Ambient Air Quality Standards.

Policy NE 404: Maintain Noise Abatement Standards

Continue to implement adopted community noise standards that are unambiguous and enforceable.

Strategy NE 404a: *Utilize Noise Standards*

Utilize adopted community noise standards that are clear, and enforceable.

Strategy NE 404b: Use Noise Mitigation Techniques

Utilize, develop and implement noise mitigation strategies including quiet paving materials, landscaping and other means to ensure all city communities, neighborhoods, and parks are desirable places to live, work and play.

Strategy NE 404c: Implement Noise Standards and Mitigation

Utilize noise standards in evaluating development proposals including transportation projects. Work with other agencies and jurisdictions to minimize noise impacts from State and Federal highways and encourage compliance with City noise standards and mitigation strategies.

Strategy NE 404d: Monitor Effect of Noise on Adjacent Land Uses

Implement noise abatement through improved land use relationships, with particular attention to the impact of transportation and industrial facilities on adjacent and nearby residential areas.

Policy NE 405: Efficient Use of Outdoor Lighting

Encourage the efficient use of outdoor lighting to reduce light pollution and conserve energy while providing for public safety.

<u>Strategy NE 405a</u>: *Develop Light Standards*

Develop lighting standards to ensure that the level and timing of outdoor lighting are appropriate to the application. Include a lighting plan for each development proposal as part of the development review process.

Strategy NE 405b: Reduce Light Pollution

Reduce light pollution from City and private lighting. Use measures such as energy-efficient lights, glare minimization and shielding techniques to direct lighting downward to reduce light trespass.

Policy NE 406: Promote Energy Efficiency and Use of Renewable Resources

Encourage, facilitate, and regulate energy efficiency and use of renewable energy resources in both the public and private sector through information and educational services, financial incentive programs, and requirements and incentives in the planning process.

Strategy NE 406a: Encourage Renewable Energy

Encourage the use of solar energy and other renewable resources in all types of development and consider such resources in the layout and construction of new development.

Strategy NE 406b: Remove Barriers to Renewable Energy Use

Identify and remove unnecessary barriers to the use of renewable energy resources in new and existing development, which arise through the strict application and enforcement of City codes.

Strategy NE 406c: Recycle Waste Materials

Work closely with El Paso County to reduce the amount of landfill needed to dispose of solid waste by recycling and reusing waste materials, and by educating the public about the importance of recycling efforts. Provide recycling opportunities at all staffed or publicly accessible City-owned or operated facilities.